ELSEVIER

Molecular Cell Research
including Signal Transduction
Vol. 1223, No. 1; 11 August 1994

BBA Biochimica et Biophysica Acta

Cumulative Contents

Information for Contributors vii

Regular Section

Regular Papers

Normal differentiation of rat brown adipocytes in primary culture judged by their expressions of uncoupling protein and the physiological isoform of glucose transporter
A. Shima, Y. Shinohara, K. Doi and H. Terada (Japan) 1

Heme oxygenase and oxidative stress. Evidence of involvement of bilirubin as physiological protector against oxidative damage
S.F. Llesuy and M.L. Tomaro (Argentina) 9

Thiol-bearing compounds selectively inhibit protein kinase C-dependent oxidative events and proliferation in human T cells
T.M. Jeitner, C.L. Kneale, R.I. Christopherson and N.H. Hunt (Australia) 15

Suppression of heat-shock protein synthesis by short-chain fatty acids and alcohols
R.J.L. Munks and B.M. Turner (UK) 23

The effect of sphingosine on the release of fibronectin from human lung fibroblasts
G. Scita and G. Wolf (USA) 29

CD14-dependent induction of protein tyrosine phosphorylation by lipopolysaccharide in murine B-lymphoma cells
C.B. LeGrand and R. Thieringer (USA) 36

Mechanism of macrophage recognition of SH-oxidized erythrocytes: recognition of glycophorin A on erythrocytes by a macrophage receptor for sialosaccharides
M. Beppu, T. Takahashi, T. Hayashi and K. Kikugawa (Japan) 47

Inhibition of porcine brain inositol 1,3,4-trisphosphate kinase by inositol polyphosphates, other polyol phosphates, polyanions and polycations
P.J. Hughes, C.J. Kirk and R.H. Michell (UK) 57

Rapid Report

Selective expression of the high-affinity isoform of the folate receptor (FR-α) in the human placental syncytiotrophoblast and choriocarcinoma cells
P.D. Prasad, S. Ramamoorthy, A.J. Moe, C.H. Smith, F.H. Leibach and V. Ganapathy (USA) 71

Subsection

Regular Papers

Phosphorylation of DNA topoisomerase I is increased during the response of mammalian cells to mitogenic stimuli
D.S. Samuels, Y. Shimizu, T. Nakabayashi and N. Shimizu (USA, Japan) 77

Leupeptin inhibits phospholipases D and C activation in rat hepatocytes
C. Benistant, G. Moehren, L. Gustavsson, E. Torres-Marquez, J.B. Hoek and R. Rubin (USA) 84

Parathyroid hormone (PTH) and PTH-related protein stimulate surfactant phospholipid synthesis in rat fetal lung, apparently by a mesenchymal-epithelial mechanism
L.P. Rubin, O. Kifor, J. Hua, E.M. Brown and J.S. Torday (USA) 91

A phospholipase C inhibitor, U-73122, blocks TSH-induced inositol trisphosphate production, Ca^{2+} increase and arachidonic acid release in FRTL-5 thyroid cells
X.-D. Wang, J.G. Kiang and R.C. Smallridge (USA) 101

Abnormalities of parathyroid hormone-mediated signal transduction mechanisms in opossum kidney cells
G. Quamme, S. Pelech, J. Biber and H. Murer (Canada, Switzerland) 107

Possible involvement of a phosphatidylinositol-type signaling pathway in glucose-induced activation of plasma membrane H^+-ATPase and cellular proton extrusion in the yeast *Saccharomyces cerevisiae*
R.L. Brandão, N.M. De Magalhães-Rocha, R. Alijo, J. Ramos and J.M. Thevelein (Belgium, Spain, Brazil) 117

Protein kinase C activation inhibits cytokine-induced nitric oxide synthesis in vascular smooth muscle cells
Y.-j. Geng, Q. Wu and G.K. Hansson (Sweden) 125

Directed cell killing (apoptosis) in human lymphoblastoid cells incubated in the presence of farnesol: effect of phosphatidylcholine
J.S. Haug, C.M. Goldner, E.M. Yazlovitskaya, P.A. Voziyan and G. Melnykovych (USA) 133

Angiotensin II induces TGF-β1 production in rat heart endothelial cells
C.C. Chua, C.A. Diglio, B.B. Siu and B.H.L. Chua (USA) 141

Short Sequence-Papers

Cloning and characterization of cDNAs encoding two normal isoforms of bovine stem cell factor
J.-H. Zhou, H. Hikono, M. Ohtaki, T. Kubota and M. Sakurai (Japan) 148

Cloning and expression of a cDNA encoding bovine muscarinic acetylcholine m3 receptor
P.H.K. Lee, P.K. Hodges, F. Glickman and K.-J. Chang (USA) 151

Human *N*-methyl-D-aspartate receptor modulatory subunit hNR2A: cloning and sequencing of the cDNA and primary structure of the protein
R.L. Foldes, S.-L. Adams, R.P. Fantaske and R.K. Kamboj (Canada) 155

Cloning and characterization of cDNA encoding rat ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase (homologue to human CD38) from islets of Langerhans
T. Koguma, S. Takasawa, A. Tohgo, T. Karasawa, Y. Furuya, H. Yonekura and H. Okamoto (Japan) 160

Regular Section

Regular Papers

Roles of myosin light-chain kinase in platelet shape change and aggregation
Y. Hashimoto, H. Sasaki, M. Togo, K. Tsukamoto, Y. Horie, H. Fukata, T. Watanabe and K. Kurokawa (Japan) 163

Ca^{2+}-dependent proteinases (calpains) and muscle cell differentiation
P. Cottin, J.J. Brustis, S. Poussard, N. Elamrani, S. Broncard and A. Ducastaing (France) 170

Perturbation of C6 glial cells by acetate leads to modulation of [^{125}I]IGF-II binding to the IGF-II/M6P receptor: implications for ligand internalization studies
W. Kiess, U. Kessler, B. Funk and A. Hoeflich (Germany) 179

Inhibition of cytokine-stimulated thymic lymphocyte proliferation by fatty acids: the role of eicosanoids
D. Rotondo, C.R.A. Earl, K.J. Laing and D. Kaimakamis (UK) 185

The transporter for the HMG-CoA reductase inhibitor pravastatin is not present in Hep G2 cells. Evidence for the nonidentity of the carrier for pravastatin and certain transport systems for BSP
K. Ziegler, M. Blumrich and S. Hummelsiep (Germany) 195

Identification of specific regions of the human endothelin-B receptor required for high affinity binding with endothelin-3
M. Adachi, Y. Furuichi and C. Miyamoto (Japan) 202

The response of human dermal microvascular endothelial cells to hypoxia
J. Mansbridge, B. Murphy, V. Morhenn, K. Hillman, K. Hillman, R. Sutherland and M. Karasek (USA) 209

Effects of DMSO-induced differentiation on arachidonate mobilization in the human histiocytic lymphoma cell line U937: responsiveness to sub-micromolar calcium ionophore A23187 and phorbol esters
B.A. Rzigalinski and M.D. Rosenthal (USA) 219

Two separate plasma membrane Ca^{2+} carriers participate in receptor-mediated Ca^{2+} influx in rat hepatocytes
G.E.N. Kass, S.C. Chow, A. Gahm, D.-L. Webb, P.-O. Berggren, J. Llopis and S. Orrenius (Sweden) 226

Phosphorylation of poly(ADP-ribose)polymerase protein in human peripheral lymphocytes stimulated with phytohemagglutinin
P.I. Bauer, G. Farkas, R. Mihalik, L. Kopper, E. Kun and A. Faragó (Hungary, USA) 234

Subsection

Regular Papers

Lateral mobility of the antagonist-occupied V_2 vasopressin receptor in membranes of renal epithelial cells
I. Pavo, D.A. Jans, R. Peters, B. Penke and F. Fahrenholz (Germany, Hungary) 240

Calcium chelators induce apoptosis – evidence that raised intracellular ionised calcium is not essential for apoptosis
R.M. Kluck, C.A. McDougall, B.V. Harmon and J.W. Halliday (Australia) 247

Molecular properties, substrate specificity and regulation of DNA-dependent protein kinase from Raji Burkitt's lymphoma cells
F. Watanabe, H. Teraoka, S. Iijima, T. Mimori and K. Tsukada (Japan) 255

Site of dopamine D_1 receptor binding to G_s protein mapped with synthetic peptides
B. König and M. Grätzel (Switzerland) 261

Role of protein phosphorylation in the degranulation of electropermeabilized human neutrophils
H.W.M. Niessen and A.J. Verhoeven (Netherlands) 267

Effects of 5,8,11,14-eicosatetraynoic acid on thapsigargin-induced calcium entry, and intracellular pH in thyroid FRTL-5 cells
E. Ekokoski and K. Törnquist (Finland) 274

Modulation of P_i transport in skeletal muscle by insulin and IGF-1
K.E. Polgreen, G.J. Kemp, B. Leighton and G.K. Radda (UK) 279

Regeneration of active receptor recognition domains on the B subunit of cholera toxin by formation of hybrids from chemically inactivated derivatives
M.J.S. De Wolf and W.S.H. Dierick (Belgium) 285

Interaction of a cholera toxin derivative containing a reduced number of receptor binding sites with intact cells in culture
M.J.S. De Wolf, E. Dams and W.S.H. Dierick (Belgium) 296

Short Sequence-Paper

Cloning and sequencing of the cDNAs encoding two alternative splicing-derived variants of the alpha subunit of the granulocyte-macrophage colony-stimulating factor receptor
X. Hu, P.D. Emanuel and K.S. Zuckerman (USA) 306

Erratum 309

Preface *vii*

Section I

Differential distribution of neurocalcin isoforms in rat spinal cord, dorsal root ganglia and muscle spindle
K. Okazaki, S. Iino, S. Inoue, S. Kobayashi and H. Hidaka (Japan) 311

Calmodulin, calbindin-D28K and calretinin in rat and chicken pineal glands: immunocytochemical and immunoblotting analysis
R. Pochet, J. Van Rampelbergh, E. Bastianelli and L.J. Van Eldik (Belgium, USA) 318

Ca^{2+} is involved through type II calmodulin-dependent protein kinase in cyclin degradation and exit from metaphase
T. Lorca, A. Abrieu, A. Means and M. Dorée (France, USA) 325

Expression of muscle calsequestrin in epithelial HeLa cells: distribution and functional role
P. Papazafiri, M. Bossi and J. Meldolesi (Italy) 333

Gain of function mutations for yeast calmodulin and calcium dependent regulation of protein kinase activity
T.J. Lukas, M. Collinge, J. Haiech and D.M. Watterson (USA, France) 341

Purification and characterization of a novel calcium-binding protein, S100C, from porcine heart
M. Naka, Z.X. Qing, T. Sasaki, H. Kise, I. Tawara, S. Hamaguchi and T. Tanaka (Japan) 348

Mechanism of S100 protein-dependent inhibition of glial fibrillary acidic protein (GFAP) polymerization
R. Bianchi, M. Verzini, M. Garbuglia, I. Giambanco and R. Donato (Italy) 354

Section II

Calpactin I binds to the glial fibrillary acidic protein (GFAP) and cosediments with glial filaments in a Ca^{2+}-dependent manner: implications for concerted regulatory effects of calpactin I and S100 protein on glial filaments
R. Bianchi, M. Garbuglia, M. Verzini, I. Giambanco and R. Donato (Italy) 361

Annexin VI isoforms are differentially expressed in mammalian tissues
M.A. Kaetzel, G. Pula, B. Campos, P. Uhrin, N. Horseman and J.R. Dedman (USA) 368

The annexin II_2p11_2 complex is the major protein component of the Triton X-100-insoluble low-density fraction prepared from MDCK cells in the presence of Ca^{2+}
T. Harder and V. Gerke (Germany) 375

Expression of annexin VI in A431 carcinoma cells suppresses proliferation: a possible role for annexin VI in cell growth regulation
J. Theobald, P.D. Smith, S.M. Jacob and S.E. Moss (UK) 383

Section III

Expression of intracellular calcium-binding proteins in cultured skin fibroblasts from Alzheimer and normal aged donors
U.G. Föhr, G.E. Gibson, B. Tofel-Grehl, B.W. Schäfer and C.W. Heizmann (Switzerland, USA) 391

S100β expression in Alzheimer's disease: relation to neuropathology in brain regions
L.J. Van Eldik and W.S.T. Griffin (USA) 398

Cumulative Contents Vol. 1223 405

Author Index 409